

REMARKS

Independent claims 15 and 18 are amended herein to further clarify the claimed subject matter. New dependent claims 29 and 30 are added.

Applicant requests that the Examiner consider two main points. First, the claims have always required that the drying energy needed to dry the ink be ascertained prior to the actual drying of the portion of the ink in question. Mallison does not teach varying the temperature or the drying capacity of the gas (air) in response to the amount of ink placed on the web material. In Mallison, adjustments to the system are made in response to the amount of ink that has already dried and thus solvent that has already evaporated. Mallison discloses (column 3 lines 23-29) that: "Steam flow through heater 8 is automatically controlled by a motorized valve 52 regulated by a device 53 sensitive to air temperature on the discharge side of the heater. Thus the thermal output of heater 8 can be controlled so as to heat the web-drying flow of air to a substantially constant temperature, and in an automatic manner" (emphasis added). While the temperature of the drying air may decrease due to the increased energy consumption required to dry a relatively larger volume of ink, any adjustments to heat input take place after that evaporation of solvent from the ink has already taken place. No other factor governing regulation of heat to heater 8 is disclosed by Mallison. Therefore Mallison cannot anticipate claims 15 and 18, which are amended herein to clarify this feature, that provide for the regulation of drying energy prior to or at least concurrent with the actual drying of any given portion of ink deposited on the web.

Second, the adjustment to fresh air inflow relative to recirculated air in Mallison does not adjust drying energy. Instead, this feature of Mallison merely serves to adjust the level of solvent

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(e.g. toluene) vapor in the air used for drying. Whether the air drying the ink on the web is fully recirculated or includes some fresh air, it remains at the same temperature. In Mallison, heating of the air by the heater 8 takes place after mixing of the recycled and the fresh air but before the air enters the plenum chamber 10 with air outlet nozzles 11 where the printed web is dried. See Mallison Figure 3. Mallison discloses that "fresh air inlet means in the form of a duct 17 is also connected to the suction side 5" (column 2 lines 53-55). As can be seen in Figure 3, suction side 5 is upstream of heater 8. The proportion of fresh air is regulated solely in response to solvent levels in the drying air, not to the amount of solvent still remaining to be dried in a section of the web bearing wet ink before it enters the drying chamber.

As claims 15 and 18 are amended to further clarify this distinguishing feature and thus are not fairly to be regarded as anticipated by Mallison, likewise all claims dependent on these two independent claims must therefore not be anticipated by Mallison.

Sincerely,

Garth Janke